



THE CITY OF SAN DIEGO

## HOW TO PREPARE A

# Typical Single-Story Framing Section

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INFORMATION  
BULLETIN

**132**

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This Information Bulletin describes how to prepare a typical framing section for single-story residential construction. One or more framing sections will be required as part of plans submitted for approval prior to permit issuance. For more information regarding plans for residential construction refer to Information Bulletin 140, "How to obtain a Permit to Build a Residential Addition."

Additional information on the preparation of plans for a single dwelling unit can be found in "California Building Code." This publication may be ordered from the International Conference of Building Officials, 5360 South Workman Mill Road, Whittier, California 90601.

## I. WHAT IS A FRAMING SECTION?

The California Building Code specifies that, for single family residential construction, all framing members shall be "anchored, tied and braced so as to develop the strength and rigidity necessary for the purposes for which they are to be used." A framing section is a cutaway view of the proposed construction that is used to show how these requirements are met. Depending on the design of your project, you may need to include more than one framing section. You must clearly show deviations in your sections wherever they occur.

Included in this bulletin are illustrations showing several typical framing sections and details. The illustrations depict conventional wood construction. All framing sections should be cross-referenced on the building plans using the floor, foundation and/or roof framing views, see Figure 1.

All framing sections should include enlarged views that detail roof and floor connections as well as lumber and footing sizes. For information on size and spacing of rafters, ceiling joists or floor joists, refer to Information Bulletin 133, "Roof and Floor Framing Span Tables."

## II. TYPICAL FRAMING SECTIONS

Included in this bulletin are the following typical cross section views:

Figure 2 illustrates a framing section with slab floor, roof rafters and ceiling joists.

Figure 3 illustrates a framing section with slab floor and vaulted ceiling.

Figure 4 illustrates a typical framing section with raised floor, roof rafters and ceiling joists.

## Documents referenced in this Information Bulletin

- California Building Code
- Information Bulletin 112, Minimum Construction Specifications
- Information Bulletin 133, Roof and Floor Framing Span Tables
- Information Bulletin 140, How to Apply for a Permit to Build a Residential Addition

Figure 5 illustrates a typical framing section with slab floor construction and a shed roof.

## III. TYPICAL DETAILS

Included in this bulletin are the following typical Details:

Detail A illustrates a typical roof ridge connection when using rafters and ceiling joists.

Detail B illustrates a typical ridge beam connection when rafters are load bearing and ceiling joists will not be used.

Detail C illustrates a typical roof connection showing rafters and ceiling joists attached to bearing walls.

Detail D illustrates a typical roof connection showing a vaulted ceiling without ceiling joists attached to bearing walls.

Detail E illustrates a typical shed roof connection attached to bearing walls.

Figure F illustrates a typical bearing wall connection to a continuous footing with slab floor construction.

Figure G illustrates a typical bearing wall connection to a continuous footing with raised floor construction.

Figure H illustrates a typical girder connection to an interior pad footing for raised floor construction.

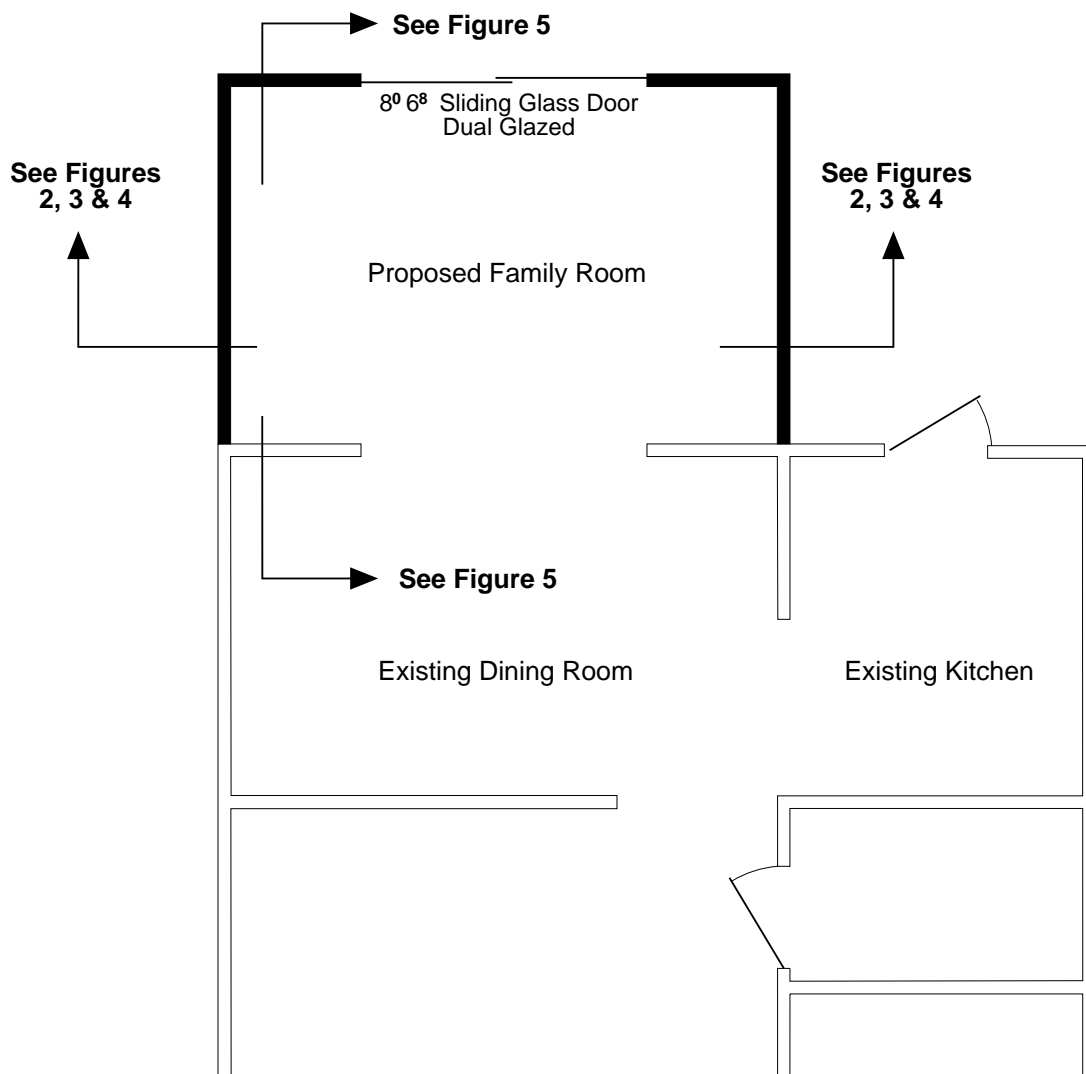
## IV. COMPLETING YOUR FRAMING SECTION

Items such as the size of all framing members, interior and exterior finishes, as well as the roof and floor covering must be specified on the plan. For more information refer to Information Bulletin 112, "Minimum Standards for Construction Specifications."

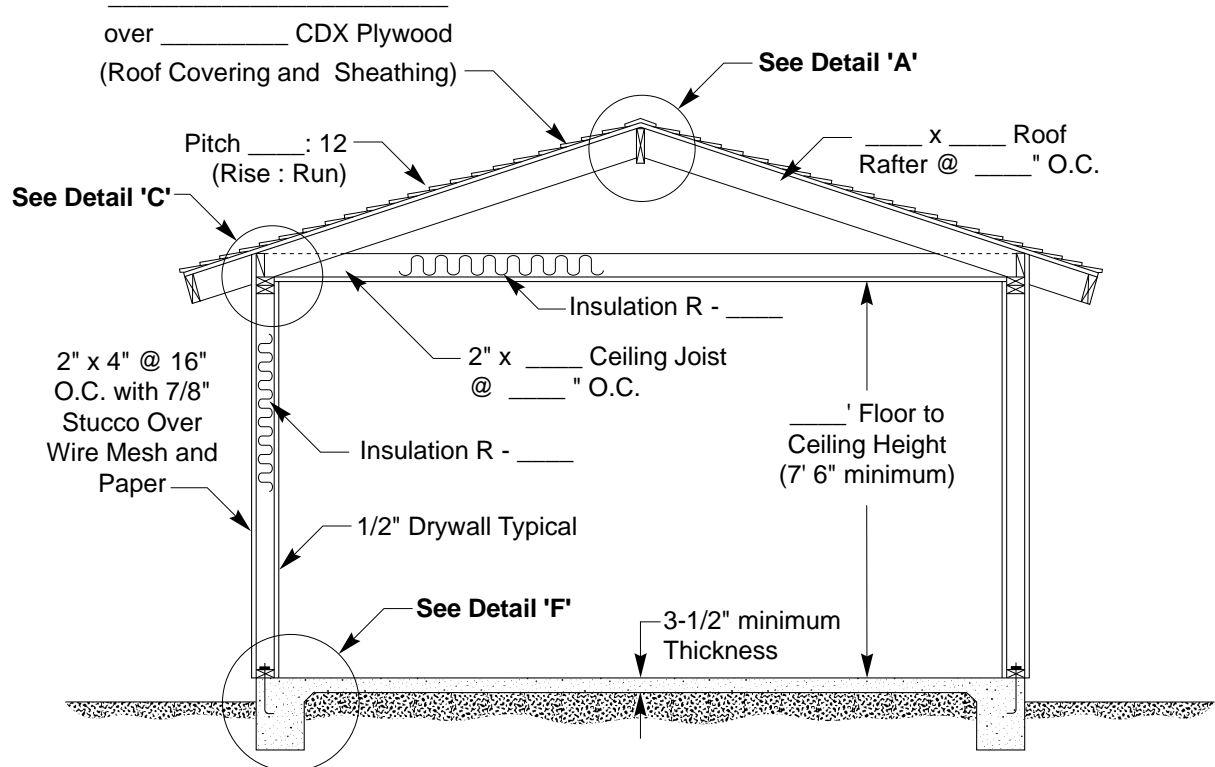
The framing sections and details shown in this bulletin are the most commonly used for single story room additions. You may include any illustration

shown that relates to your project by completing the blank portions and attaching them to your plans. These illustrations do not reflect all additions or designs and cannot be used in every case.

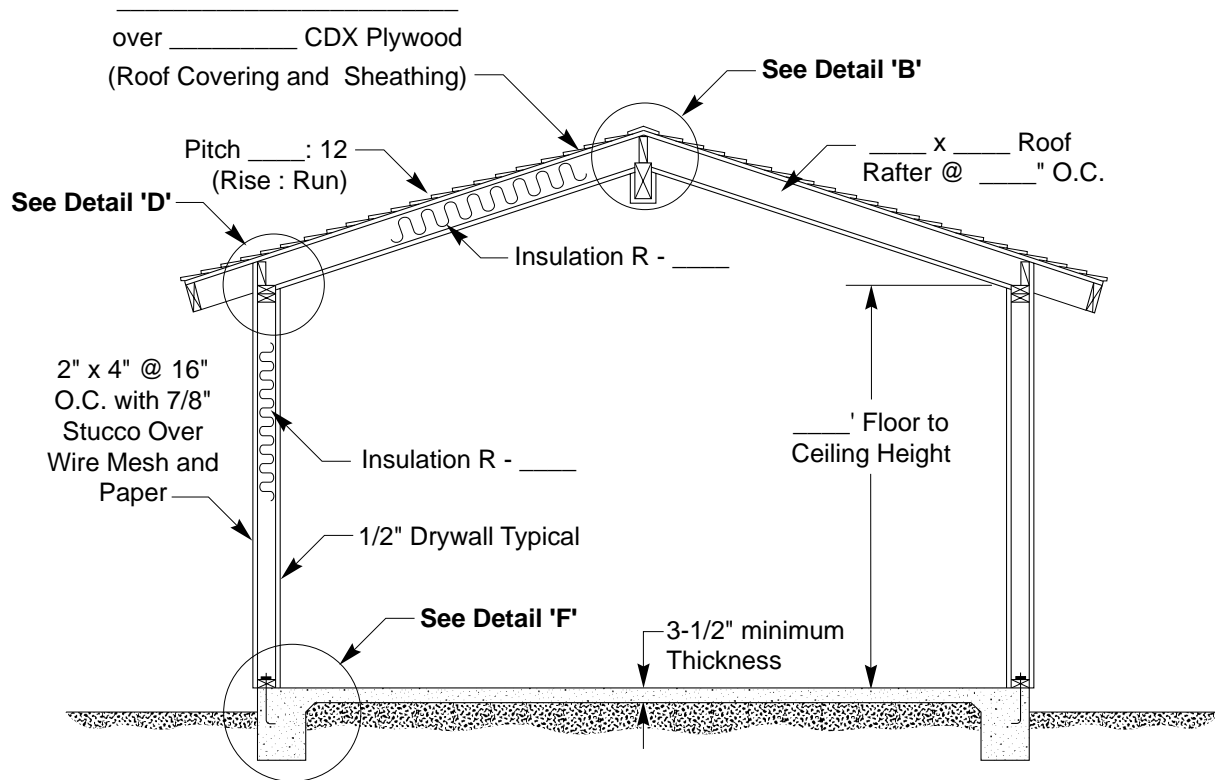
**Figure 1/ Floor Plan with Cross Referenced Section Views**  
(x 25.4 for mm)



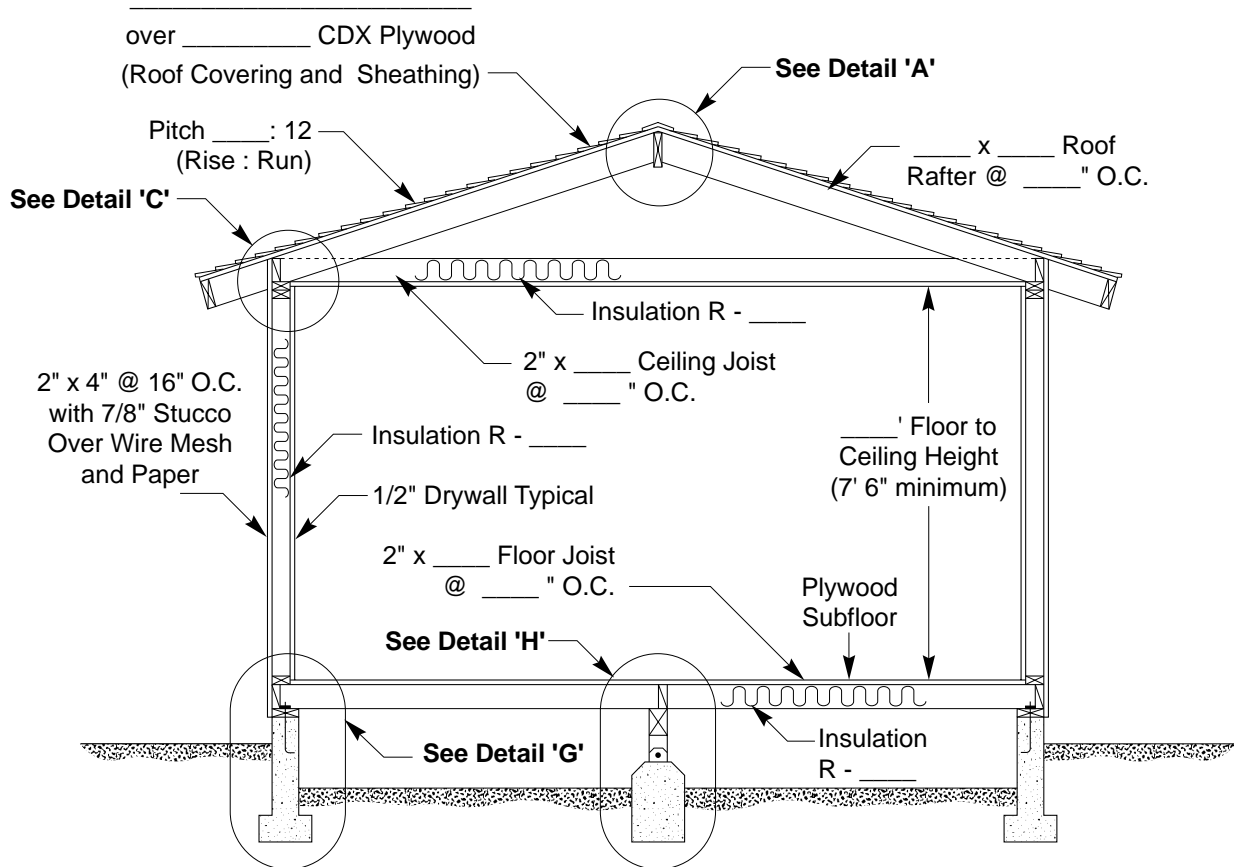
**Figure 2/** Typical Cross Section View, Slab Floor with Ceiling Joist  
(x 25.4 for mm)



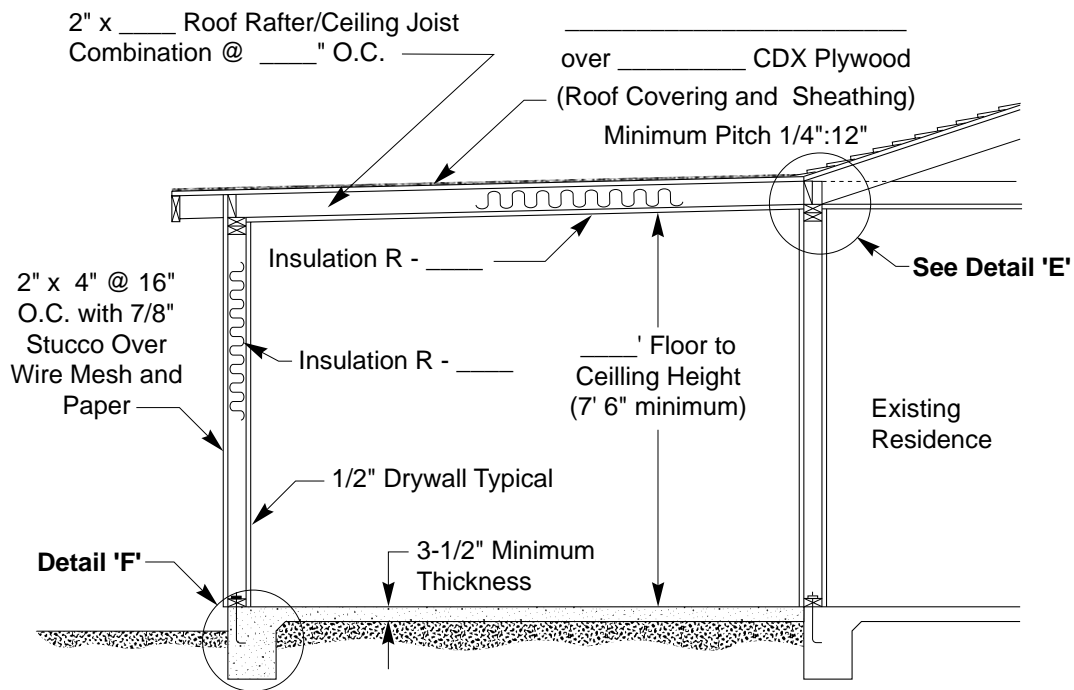
**Figure 3/ Typical Cross Section View, Slab Floor with Vaulted Ceiling**  
(x 25.4 for mm)



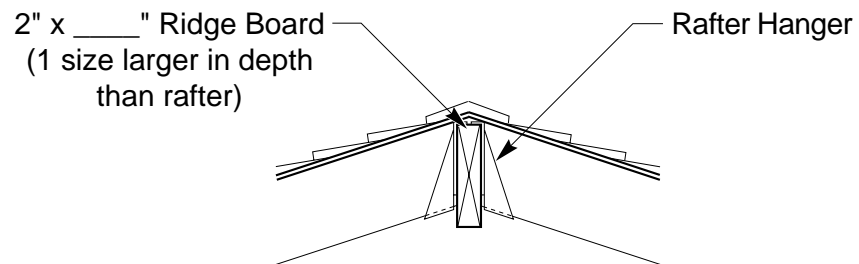
**Figure 4/ Typical Cross Section View, Raised Floor with Ceiling Joist**  
(x 25.4 for mm)



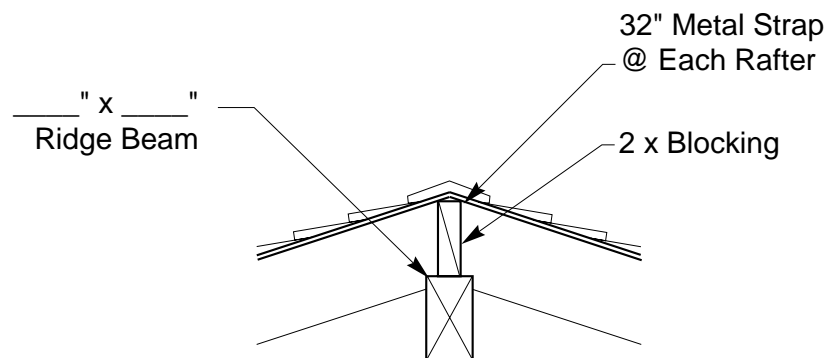
**Figure 5/ Typical Cross Section View, Slab Floor with Shed Roof**  
(x 25.4 for mm)



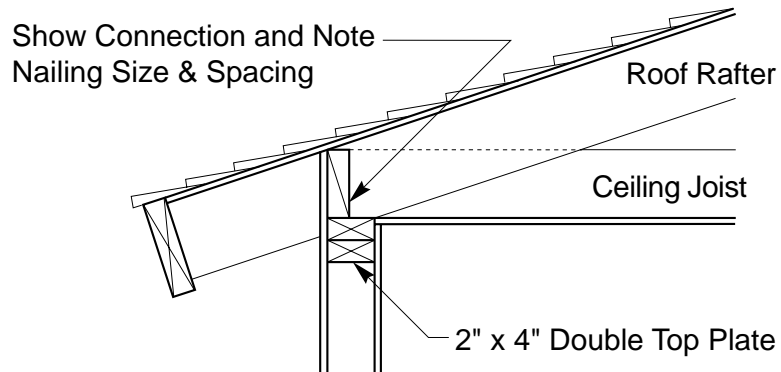
**Detail "A"/ Typical Roof Connection, Non-Load Bearing Ridge**  
(x 25.4 for mm)



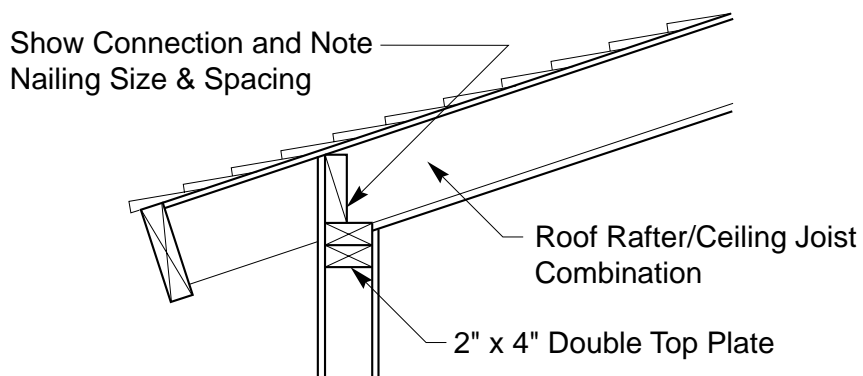
**Detail "B"/ Typical Roof Connection, Load Bearing Ridge**  
(x 25.4 for mm)



**Detail “C”/ Typical Roof Connection With Ceiling Joist**  
(x 25.4 for mm)

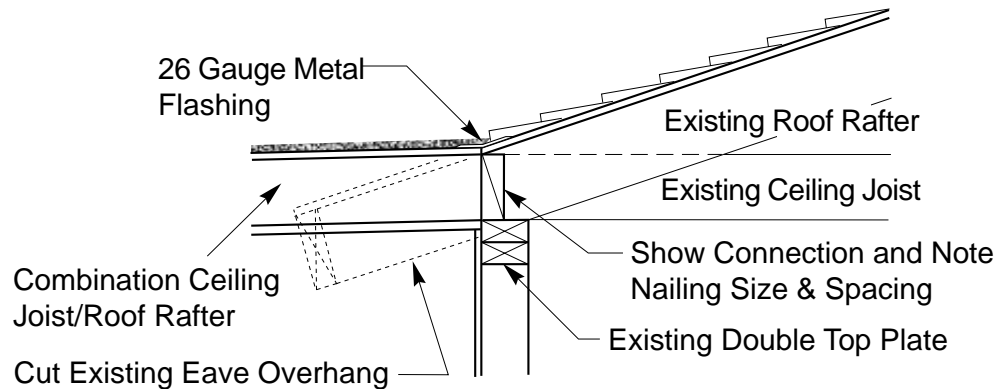


**Detail “D”/ Typical Roof Connection With Vaulted Ceiling**  
(x 25.4 for mm)

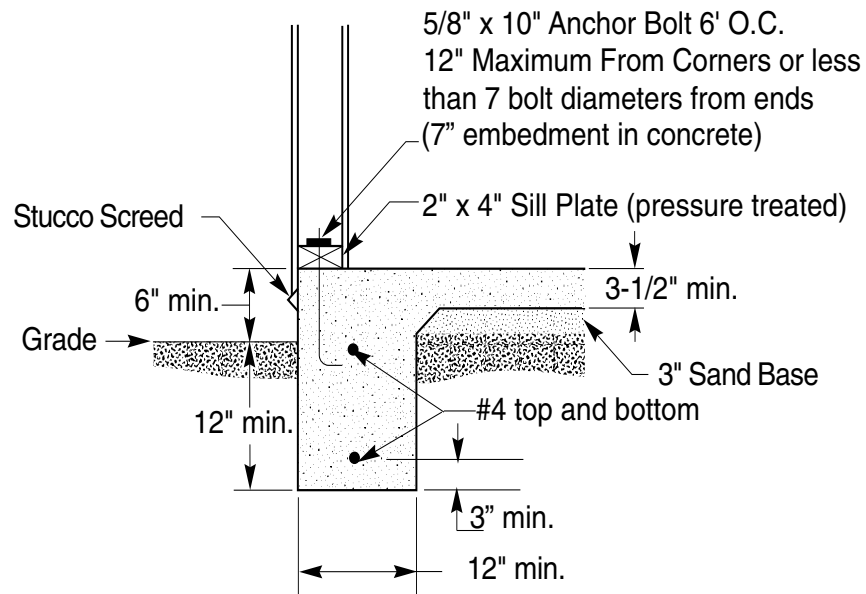




### Detail "E"/ Typical Roof Connection, Shed Roof (x 25.4 for mm)

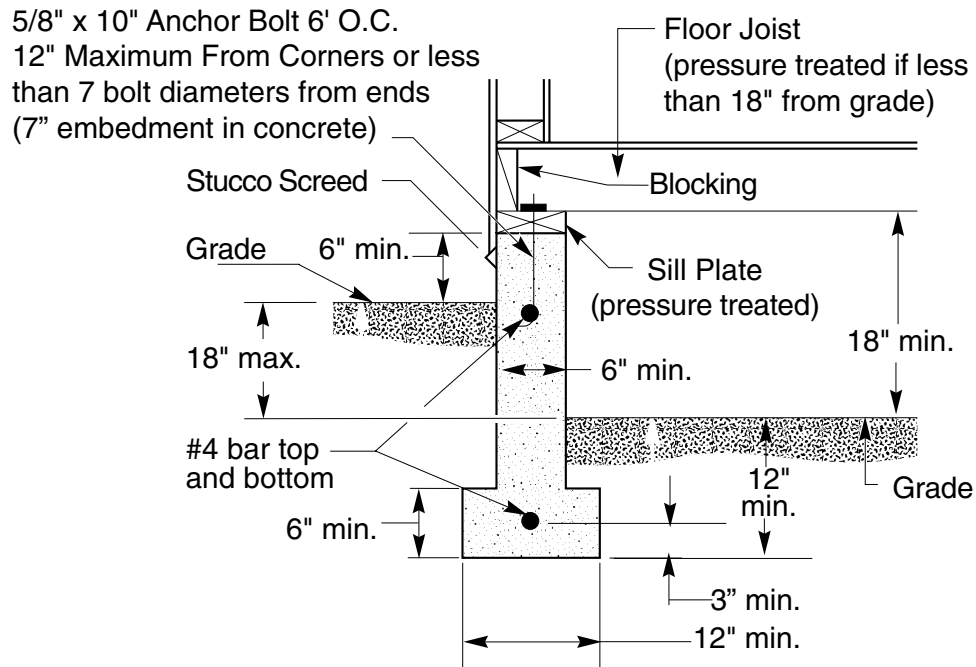


### Detail "F"/ Typical Floor Connection, Continuous Footing (x 25.4 for mm)



**Detail "G"/ Typical Floor Connection, Foundation or Stem Wall**

(x 25.4 for mm)

**Detail "H"/ Typical Floor Connection, Square Pad footing**

(x 25.4 for mm)

